



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/527,194	03/17/2000	G. Alton Waschka	HES-Y-336	3616

7590 01/09/2004

DUANE MORRIS LLP
1667 K STREET, N.W.
SUITE 700
WASHINGTON, DC 20006

EXAMINER

PHU, PHUONG M

ART UNIT	PAPER NUMBER
----------	--------------

2631

DATE MAILED: 01/09/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/527,194

Applicant(s)

WASCHKA ET AL.

Examiner

Phuong Phu

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 12-16 and 19 is/are allowed.
- 6) ☒ Claim(s) 6-11, 17, 18, 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is responsive to the RCE filed on 12/2/03.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8-11, 17, 18 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8, 17 and 18 recite the limitation "the subsequent chirp" (line 5). This limitation is lack of antecedent basis.

Claim 20 recites the limitation "the chirp signal" on line 5. This limitation is lack of antecedent basis.

Claims (if any) depended on above claims are therefore also rejected.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 6, 7 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Degura et al (5,105,294), prior art of record.

As per claims 6 and 20, see figures 2B, 2C, 3B, 3C, 12 and 13, and col. 12, line 27 to col. 15, line 30 and col. 15, lines 60-68, Degura et al discloses a method for discriminating between 2

Art Unit: 2631

types of transmitters, corresponding to transmitter paths (41, 42, 43) and (41, 42, 47) for receiving signals (1N-1) and (1N-n), respectively (see figure 12), characterized by chirp conversions (43) and (47), respectively, for transmitting chirp signals of opposite slopes (44) and (48), respectively, (inherently within a same frequency operating range of means (49)), wherein the method/system (see figure 13) comprises:

step (53) for receiving a chirp signal;

step (54, 58) for detecting the slope of the received signal wherein the detection includes chirp conversion means (54) and (58) having reverse slopes corresponding to the conversions (43) and (47), respectively; for instance, means (54) would output an output wave shape (see figure 3E) if means (54) detects a signal having slope (44), and so on; and

step (54, 58) after detecting the slope of received signal, inherently can recognize or determine from which transmitter the received signal has been transmitted so that step (54, 58) can further forward its output to a proper path corresponding to that transmitter's characteristic for data recovery (OUT-1, OUT-n), or in another word, the transmitter type is detected as a function of the detected chip slope.

As per claim 7, Degura et al discloses step (49, 50) for asynchronously transmitting chirp signals of opposite slopes outputted from means (43, 47) (see figure 12).

6. Claims 6 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Otto (5,859,613), newly-cited.

As per claims 6 and 20, see figures 1, 5 and 7, and col. 3, line 46 to col. 5, line 32 and col. 6, line 56 to col. 9, line 2, Otto discloses a method (see figure 5) comprising:

step (52) for receiving a chirp signal;

step (54) for detecting the slope of the received chirp signal; and
step (56) for determining transmitter type as a function of the detected chirp slope.

Allowable Subject Matter

7. Claims 1-5, 12-16 and 19 are allowed.
8. Claims 8-11, 17 and 18 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Response to Arguments

9. Applicant's arguments, filed on 12/2/03, with respect to the rejection(s) of claim(s) 1-18, as being anticipated by Degura et al, have been fully considered, but are, in part, persuasive. The rejection to claims 1-5 and 8-18, as being anticipated by Degura et al, has been withdrawn since the claims have been amended to overcome the rejection. However, regarding to claims 6 and 7, the applicant argues that (i) Degura et al does not disclose a multiple access system; (ii) Degura et al does not disclose a mobile station; and (iii) Degura et al does not disclose feature of encoding data in the chirp signals as the starting frequency of subsequent chirps. The examiner respectfully disagrees because claims 6 and 7 do not recite any limitations regarding (i)-(iii).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 703-308-0158. The examiner can normally be reached on M-F (8:30-6:00) First Monday Off.

Art Unit: 2631

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 703-306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Phuong Phu
Primary Examiner
Art Unit 2631

Phuong Phu
Phuong Phu
12/15/03

**PHUONG PHU
PRIMARY EXAMINER**